Living With Bats

Understanding and Controlling Bats

Nancy Renison

Arizona Game and Fish Department

bats@azgfd.gov

Bats Roost In Buildings...

Big brown bats

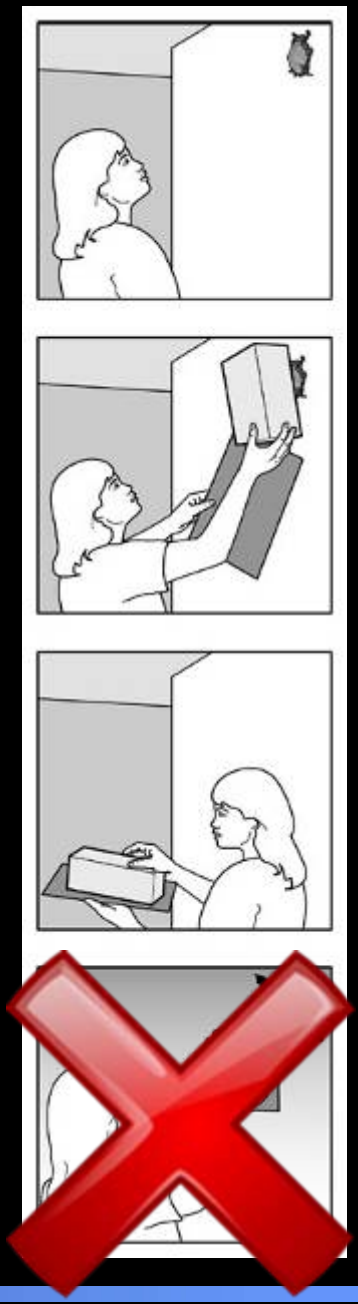
(Eptesicus fuscus)

Whispering Pines, AZ

Bats in Buildings...

- Capturing a solitary bat
  - Wearing protective gloves,
  - Place container over the bat,
  - Slide cardboard or plastic between the container and the surface
  - Release bat outside or submit for testing*

** If exposure cannot be ruled out, bat must be tested for rabies– DO NOT RELEASE!!*

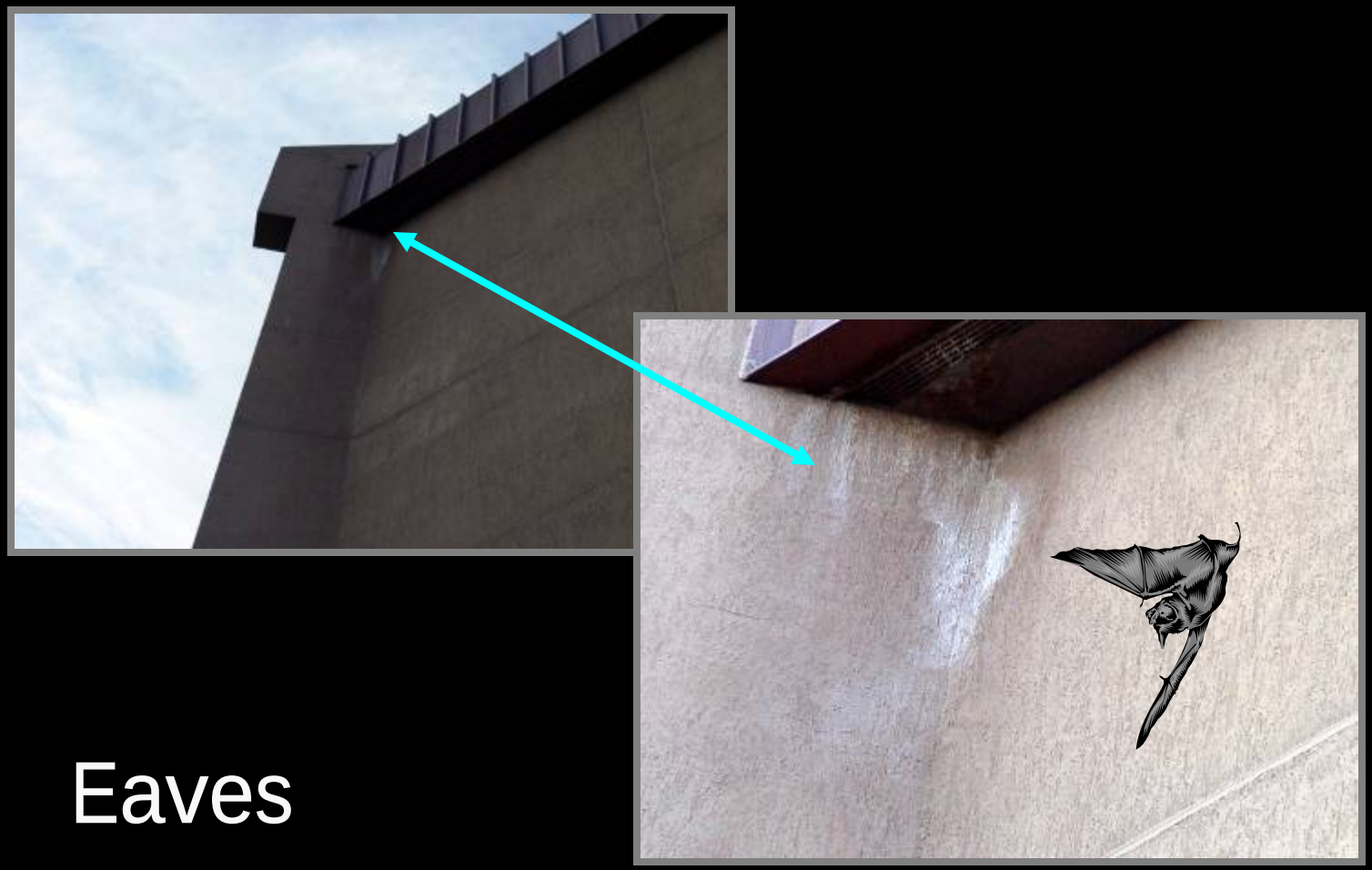


Bats in Buildings...

- Large colonies can cause odor and noise problems justifying exclusion.
- Most bat exclusion procedures are often simple and inexpensive to the home or business owner.
- Exclusion from entire buildings is also feasible, although professional advice may be warranted.

How Do Bats Get In?

Potential Portals...



Eaves

Potential Portals...

Gables

Flashing

Potential Portals...

Outdoor Fixtures

Concrete Fascia

Roost Selection...

- Bats that use buildings are very opportunistic...they select roost sites that can vary daily and seasonally...
  - Day – Dark, protected niches for sleeping
  - Maternity – Energy efficient temperatures and protection (specialized day roost)
  - Night – Warm, draft-free hangouts near food and water resources
  - Migratory – Temporary shelter (Spring/Fall)
  - Hibernation – Cold, humid undisturbed habitats

Assessing Buildings for Bat Use...

- Telltale signs:
  - Bat Guano (droppings)

Assessment…

- Telltale signs:
  - Bat Urine
  - Old roosts may have urine crystals (amber)

Assessment....

- Telltale signs:
  - Dark staining

Assessment…

- Telltale signs:
  - Bats!!

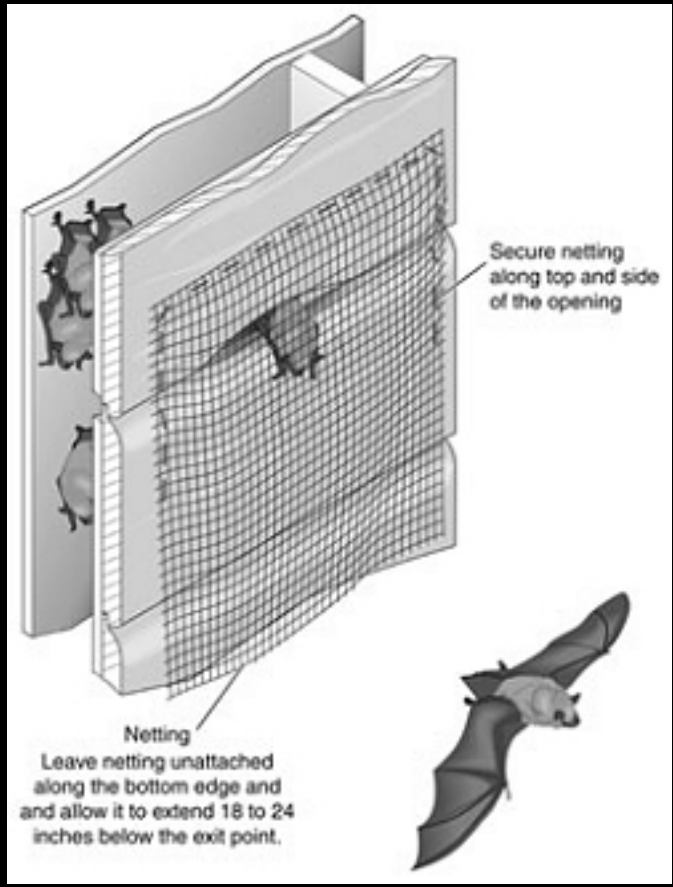
Inside

Or

Outside

Before Sealing Begins...

- Provide a Safe Exit for Bats
  - Determine main access points
  - Install netting, plastic, or tubes that function as one-way valves over openings
  - One-way valves allow bats to leave but not reenter
  - Leave valves in place for 5-7 days (bats may not exit every night)
  - Avoid exclusions during the maternity season as young may become trapped inside



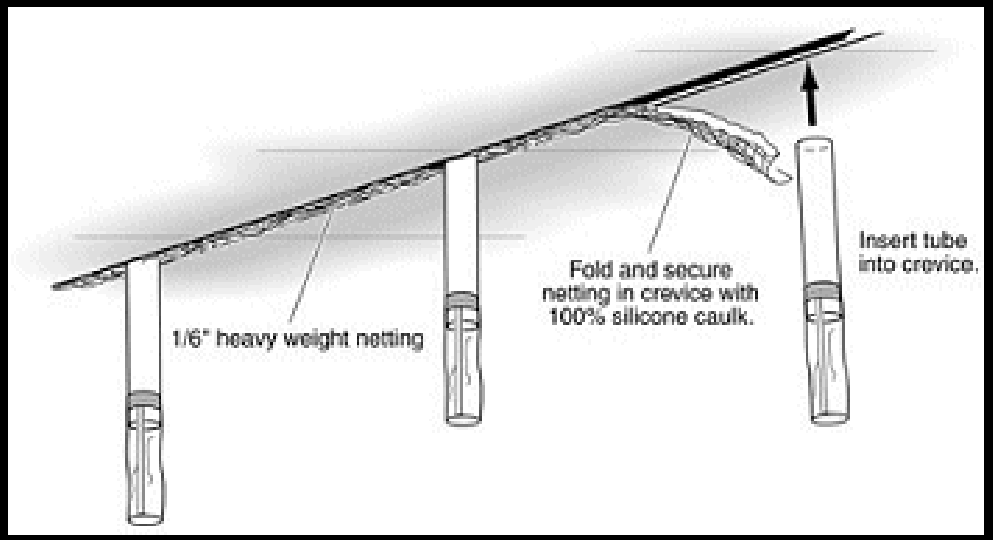
Exclusion Step 1

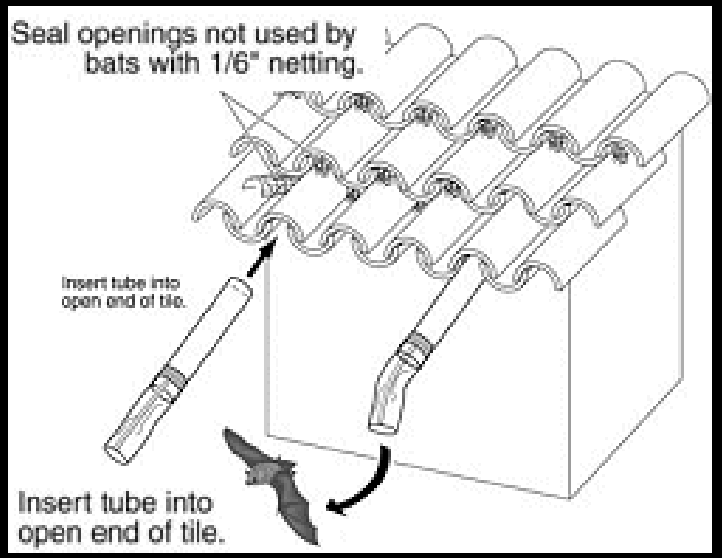
Locate Bat Portals...

- Access points can be very obvious or cryptic in nature
- Observation is best method to find all points of entry...
  - Observe at sunset or sunrise (exiting or entering bats)
  - Station observers strategically around suspected areas (compass points)

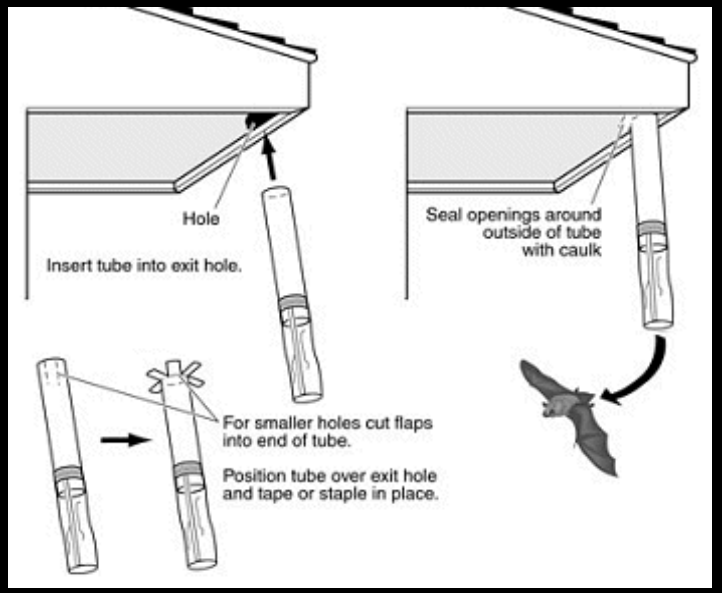
Exclusion Step 2

Install One-way Escape Valve(s)





Seal Remaining Openings



Exclusion Step 2

One-way valve examples

Do-It-Yourself

Bat Cone

www.batcone.com

Bat Excluder

www.wildlifecontrolsupplies.com

Exclusion Step 3

- Leave escape valves in place for 5-7 days
- Remove one-way valves and seal openings

Exclusion Step 4

Avoid Future Exclusions

- Be proactive with maintenance
- Conduct regular inspections (minimum Fall/Spring)
  - Check for bat use
  - Assess for potential bat portals
  - Repair openings as needed

Exclusion Step 5

- After excluding bats consider ways to improve bat habitat or mitigate roost loss
  - Consider installing bat houses
  - Construct wildlife pond
  - Conserve hedge rows and wind breaks
  - Preserve forest edges and old trees

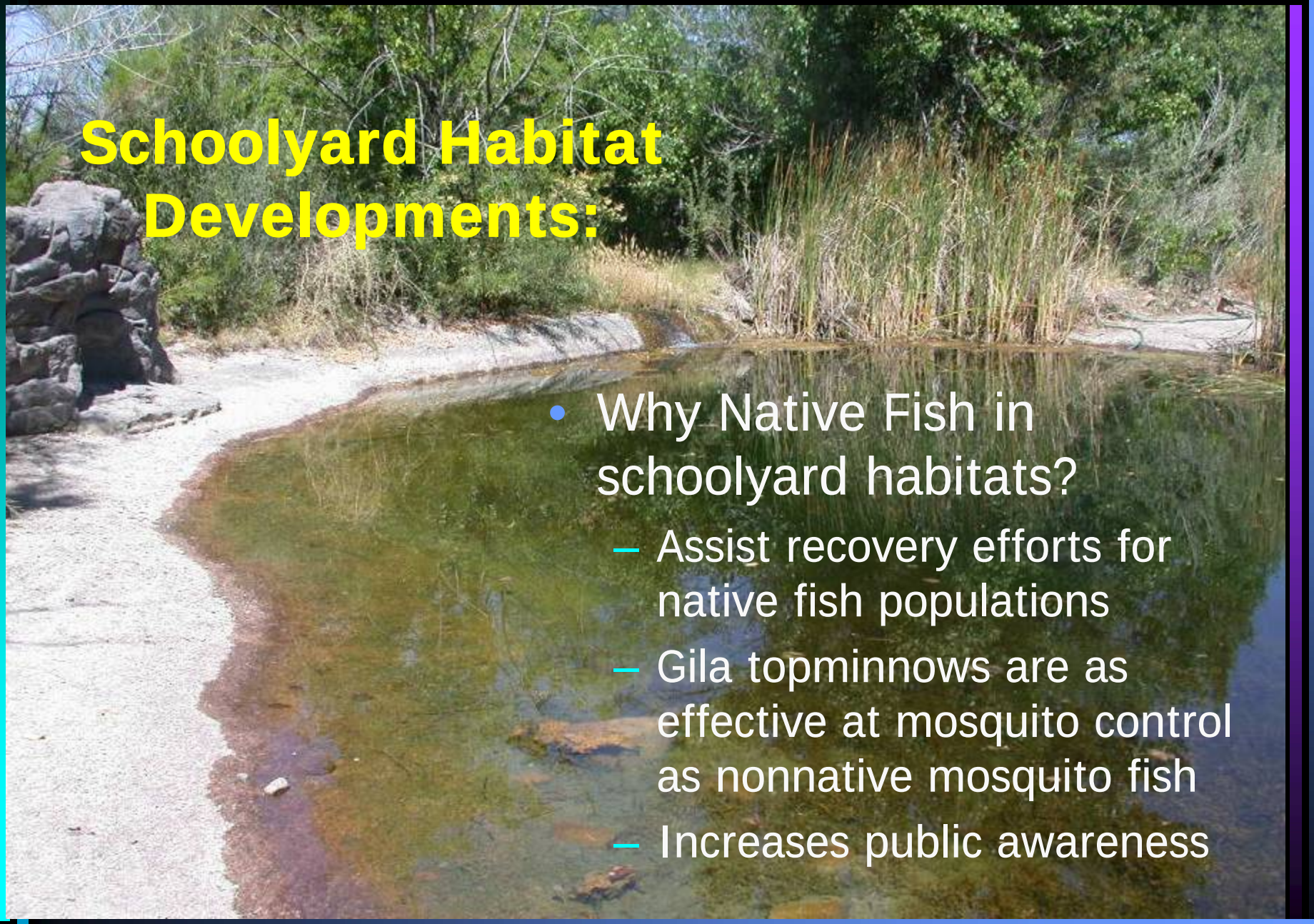
Bat Houses

Hwy 260 Bridge Boxes

Bat Condo University of Florida

Pioneer Living History Museum Bat Adobe

Sand Box House (Belfry)



Schoolyard Habitat Developments:

- Why Native Fish in schoolyard habitats?
  - Assist recovery efforts for native fish populations
  - Gila topminnows are as effective at mosquito control as nonnative mosquito fish
  - Increases public awareness

Wildlife Water Developments:

Wildlife Water Developments:

Photo Credits:

- J. Scott Altenbach,
  University of New Mexico
- Arizona Game & Fish Department photographic collection
- Merlin Tuttle,
  Bat Conservation International

Bat Fact Credits:

Important Bat Facts

Published by Bat Conservation International

Austin, Texas

www.batcon.org

Phone: (512) 327-9721

Arizona Game & Fish Contacts:

- Arizona Game & Fish Website
  www.azgfd.com
- AZGFD Bat Conservation Project
  Nancy Renison, Angie McIntire
  Phone: (623) 236-7529, 7574*
- AZGFD Heritage Grant Information
  Robyn Beck
  Phone: (623) 236-7530*
- AZGFD Fish Program
  Contact Your Regional Office
  www.azgfd.com

Any Questions?